STRAWBERRIES IN CONSUMER PERSPECTIVE: UNCOVERING CONSUMER PREFERENCE IN PURCHASING STRAWBERRIES (Fragaria Ananasa) at GARDEN BERRY FARM, CIWIDEY, BANDUNG.

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Abstract. Ciwidey District in Bandung Regency is a major center for strawberry production and a leading agrotourism destination in West Java, with Garden Berry Farm offering visitors the unique experience of picking strawberries directly from the field. This study aims to identify consumer preferences for strawberries at Garden Berry Farm, focusing on key product attributes influencing purchasing decisions. Consumer preference is defined as a liking, choice, or something more favored by consumers for consumption or use[1]. The research used a descriptive quantitative survey method, involving 30 purposively selected consumers. Data were collected using a Likert-scale questionnaire to assess attributes such as color, taste, size, shape, shelf life, price, and service. Results show that 86.7% of respondents highly favored the balanced sweet and sour taste of the strawberries, while 80% appreciated the large yet convenient fruit size. Color and shape also received positive feedback, with satisfaction rates of 76.7% and 73.3%, respectively. However, shelf life received the lowest satisfaction score, with only 56.7% of respondents satisfied. Overall, Garden Berry Farm has met consumer preferences in terms of product quality and service, but improving shelf life is recommended to further enhance consumer satisfaction.

1 Introduction

Understanding consumer preferences is a key aspect of marketing strategy, particularly in high-value horticultural commodities such as strawberries. Consumer preferences are shaped by evaluating a range of product choices influenced by both internal factors—such as perception, income, and needs—and external factors including price, promotion, and location. [2]. About consumer behavior, purchasing decisions involve complex considerations, including what consumers buy, why, when, and how they use the product. [3]. Consumer preferences are paramount in understanding purchasing behavior, especially for strawberries (Fragaria ananassa), recognized for their vibrant red color, distinctive sweet-sour taste, and high nutritional value. Consumer preference refers to the degree of liking or favorability a consumer has toward a particular product. Previous studies indicate that consumer preferences are shaped by a variety of factors, including product quality, price, location, promotion, and consumer demographics[4]. Before making a purchase decision, consumers typically evaluate the attributes associated with the product to determine its suitability to their needs and expectations. As noted by Zulkifli and Muhammad (2021)[5], these attributes significantly influence purchasing decisions by forming the perceived product value in the consumer's mind. [6]. Strawberries are considered a high-value horticultural commodity, primarily due to their bright red coloration and appealing sweet flavor profile.[7].

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In Indonesia, According to data from Statistics Indonesia (BPS)[8], West Java was the largest strawberry-producing province in Indonesia in 2022, with a total production of 28,895 tons—an increase of 193.05% compared to the previous year. Especially Ciwidey one of District in Bandung Regency is a well-known strawberry production center and a popular agrotourism destination, exemplified by Garden Berry Farm, which offers visitors a "pick-your-own" experience. Identifying the product attributes that most influence consumer preferences is therefore critical for producers and businesses in this sector. However, research specifically addressing consumer preferences for strawberries within the context of agrotourism in Ciwidey remains limited. This study aims to identify and analyze consumer preferences for strawberries at Garden Berry Farm, focusing on key product attributes such as color, taste, size, shelf life, price, and service. The findings are expected to provide valuable insights for farm managers, business practitioners, and local government in enhancing product quality, service delivery, and marketing strategies to better align with consumer needs.

2 Research method

This research employed a descriptive quantitative survey method to analyze consumer preferences for strawberries at Garden Berry Farm, Ciwidey District, Bandung Regency. This method systematically and factually describes the facts and the relationships between the variables under investigation by collecting, processing, analyzing, and interpreting data for statistical hypothesis testing.[9]. The study was designed to identify which product attributes are most considered by consumers when purchasing strawberries in an agrotourism context.

2.1. Data Measuring and Collecting

Data were collected using a structured questionnaire developed based on relevant literature and research objectives. The questionnaire used a Likert scale to measure consumer preferences for various strawberry attributes, namely color, taste, size, shape, shelf life, price, and service. Prior to distribution, the questionnaire was validated by experts to ensure clarity and relevance.

2.2. Population and Sampling

The population in this study comprised all consumers who visited Garden Berry Farm during the research period. The sampling technique applied was accidental sampling, where respondents were chosen based on their presence and willingness to participate at the time of data collection. A total of 30 respondents were obtained, which is considered sufficient for descriptive analysis.

2.3. Variables and Data Analysis

The variables observed in this study included product attributes (color, taste, size, shape, shelf life, price, and service) as independent variables, and consumer preference as the dependent variable. This approach is in line with previous research, which stated that "*The dependent variable is consumer preference, while the independent variables are ingredients, quality, and flavor,' and found a positive association between these product attributes and consumer preference.*" [10].

Data analysis was conducted descriptively to determine the level of consumer preference for each attribute. The percentage of respondents for each answer category was calculated using the following formula:

$$Total\ Score = p1 + p2 + p3 + p4 + p5 + p6$$

To determine the maximum and minimum possible scores, the following formulas were used:

$$Maximum\ Score = n\ x\ Xmaks$$

$$Minimum\ Score = n\ x\ Xmin$$

Where :
n : Number of statement
Xmax : Highest posible score
Xmin : Lowest posible score

For interpreting the total score, intervals were established as follows (Sugiyono, 2019):

$$Interval = \frac{Xmax - Xmin}{5}$$

Based on this calculation, the interpretation categories for the total score are:
20 – 36 : Strongly Disagree (SD)
37 – 52 : Disagree (D)
53 – 68 : Neutral (N)
69 – 84 : Agree (A)
85 – 100 : Strongly Agree (SA)

Furthermore, to allow proportional comparison between respondents, the total score was converted into a percentage using the following formula:

$$precentage = \frac{Total\ Score}{Number\ of\ respondent}\ x\ 100\%$$

3 Results and discussion

3.1. Result

A. Consumer Purchase Behavior

Most of the 30 respondents indicated that their main reason for consuming strawberries is the freshness and health benefits offered by the fruit, with consumption typically in the form of fresh rather than processed strawberries. Consumers prefer strawberries that are bright red, large, sweet, fresh-tasting, and have good shelf life as indicators of high-quality fruit[2]. The majority usually purchase strawberries directly from supermarkets or by picking them at farms such as Garden Berry Ciwidey, which is favored for its spacious grounds and complete facilities, including gardening tools and a restaurant serving strawberry-based dishes and

Sundanese cuisine, thus providing added value for visitors. However, the frequency of visits to the farm tends to be irregular or infrequent, sometimes even being the first visit, indicating potential for the farm to increase visit frequency through marketing strategies and the development of more varied visitor experiences.

B. Consumer Preferences Toward All Strawberry Attributes

Table 1. Summary of Consumer Preferences for All Strawberry Attributes

Score Range	Criteria	Frequecy	Presentage
20 - 36	Strongly Disagree (SD)	0	0%
37 - 52	Disagree (D)	1	3%
53 - 68	Netral (N)	6	20%
69 - 84	Agree (A)	17	57%
85 - 100	Strongly Agree (SA)	6	20%
	Total	30	100%

Analysis of responses from 30 consumers at Garden Berry revealed that most respondents expressed a positive preference for the various strawberry attributes assessed. The preference distribution shows that none of the respondents strongly disagreed, only one (3%) disagreed, 20% were neutral, 57% agreed, and 20% strongly agreed. These findings suggest that the strawberries at Garden Berry are largely able to satisfy consumer expectations across the majority of attributes examined.

C. Consumer Preferences for Individual Strawberry Attributes at Garden Berry

Tabel 2. Consumer Preferences for Individual Strawberry Attributes at Garden Berry

Statement	Score					Frequency	Score Total	Criteria
	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)			
1	1		4	21	4	117	78,00	Agree (A)
2			8	12	10	122	81,33	Agree (A)
3	1		5	15	9	121	80,67	Agree (A)
4	1	4	8	14	3	104	69,33	Agree (A)
5	2		9	13	6	111	74,00	Agree (A)
6	2		6	15	7	115	76,67	Agree (A)
Total							690	
Average							115	

This research evaluated six primary attributes influencing consumer preferences for strawberries at Garden Berry Farm in Ciwidey: fruit color, size, taste, shelf life, price, and service facilities including ease of access. The analysis revealed that all attributes received positive assessments from consumers. Taste achieved the highest total score of 81.33, indicating that respondents agreed the balanced sweet and sour flavor was highly satisfying. The size attribute also received a high score, reflecting consumers' preference for large

strawberries that are still easy to eat. Although medium-sized strawberries are more preferred, larger fruits still hold their own utility value and can offer ease of consumption due to their appealing shape and greater flesh volume [11]. The bright red color of the strawberries, scoring 78.00, was considered a key indicator of freshness, supporting Sari et al. (2017), a distinctive visual trait of strawberries is their deep red skin and bright red flesh, accompanied by a strong aroma, making the fruit aesthetically appealing and commercially valuable [12]. The price of IDR 80,000 per kilogram received a score of 74.00, suggesting that consumers found the price reasonable for the quality offered. Service facilities and accessibility scored 76.67, indicating that a positive visiting experience can further encourage purchase interest, which aligns with Kotler & Keller's (2020) theory on the role of service in fostering customer loyalty. Conversely, shelf life received the lowest total score among all attributes, indicating that some consumers are concerned about how long strawberries remain fresh.

3.2. Discussion

This study involved 30 purposively selected respondents representing strawberry consumers at Garden Berry Farm. Most respondents were women and within the productive age range of 21–40 years, then younger consumers aged 18–20, mainly students, also contributed, though in smaller numbers, highlighting Garden Berry's appeal to a diverse market but with a primary focus on productive-age buyers. The findings of this study are consistent with those of Octaviani et al. (2014), who reported that the majority of fruit product consumers were women around the age of 21.[13]. Income analysis revealed that respondents with lower to middle monthly expenditures below IDR 5,000,000 have relatively low monthly expenditures—tend to be more price-sensitive. They are more likely to choose affordable strawberries and place greater emphasis on price and promotional offers rather than on the intrinsic quality attributes of the product.[14]. While those with higher spending, they tend to perceive higher prices as an indicator of quality and are willing to pay a premium for strawberries that meet these standards.[15]. Product attributes-including quality, completeness, packaging, and price-were key factors influencing consumer preference and repeat purchase intention. High product quality, reasonable pricing, and comprehensive service were found to enhance consumer trust and loyalty, underscoring the importance of these attributes in meeting consumer needs and strengthening market competitiveness.

4 Conclusion and recommendation

4.1. Conclusion

Based on the research findings, consumers demonstrated a positive acceptance of the strawberry attributes offered at Garden Berry. Nearly all evaluated attributes-including color, taste, size, shelf life, price, and service-were considered to meet the expectations and needs of both visitors and buyers. Taste, particularly the balanced sweet and sour flavor, received the highest appreciation, as reflected by its top score. Large yet convenient fruit size was also a notable attraction, adding value to the product. However, shelf life received the lowest score, indicating that some consumers expect improvements in strawberry freshness after purchase. Despite this, other attributes such as bright red color, appropriate pricing, and good service-including facilities and accessibility-helped compensate for this shortcoming, resulting in overall consumer satisfaction and a continued interest in repeat purchases or recommendations of Garden Berry to others.

4.2. Recommendation

Based on the findings showing that respondents generally agreed with all evaluated attributes, it is recommended that Garden Berry management continue to improve the taste and size of their strawberries, as these are the most influential factors for consumer preference. Maintaining the bright red color is also important as a key visual appeal. Management should address shelf life by implementing better storage techniques to keep strawberries fresh longer. Competitive pricing that matches product quality is essential to maintain consumer trust. Additionally, enhancing facilities and accessibility will improve the overall visitor experience and foster greater customer loyalty. For future research, it is advisable to expand the respondent base and consider additional factors such as promotion and product innovation to gain a more comprehensive understanding of consumer preferences.

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